



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,981	08/22/2003	Andrew Harker	30020778US02	3035
7590 11/01/2005			EXAMINER	
Paul D. Greeley, Esq. Ohlandt, Greeley, Ruggiero & Perle, L.L.P. 10th Floor One Landmark Square Stamford, CT 06901-2682			DOAN, JENNIFER	
			ART UNIT	PAPER NUMBER
			2874	
DATE MAILED: 11/01/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,981

Applicant(s)

HARKER, ANDREW

Examiner

Jennifer Doan

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4-17 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1, 2 and 4-17 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 081805.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

Applicant's communication filed on August 18, 2005 has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendment made to the claims, are persuasive. In view of further search, however, a relevant document Yamashita (EP 1164367) is good to applied; therefore, a new rejection is set forth below. This action is **not** made final.

Information Disclosure Statement

1. The prior art documents submitted by applicant in the Information Disclosure Statement filed on 08/18/05, have all been considered and made of record (note the attached copy of form PTO-1449).

Specification

2. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7, 11-14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita (EP 1164367).

With respect to claim 7, Yamashita (figure 2) discloses an optoelectronic assembly comprising an optical emitter (LD) for emitting light along a main optical path, a mouldable (30), substantially rigid optical light guide (40) have a first end for receiving a small proportion of the light from the main optical path and a second end, and a photodetector (PD1) located adjacent the second end of the optical light guide (40) for receiving light there from, wherein the optical light guide (40) includes a structural feature to facilitate interception of the light from the main optical path (see figure 2).

With respect to claim 11, Yamashita (figure 9) discloses an optoelectronic assembly, wherein the optical emitter (LD), the photodetector (PD1) and the optical light guide (313) are mounted on a substrate (320), and the photodetector (PD1) is arranged at a periphery of the substrate (320).

With respect to claim 12, Yamashita (figure 2) discloses an optoelectronic assembly further including a plurality of mouldable, substantially rigid optical guides, and a plurality of photodetectors (PD1, PD2), wherein the plurality of optical light guides each has a second end located adjacent at a respective one of the photodetectors (PD1, PD2).

With respect to claim 13, Yamashita (figure 9) discloses an optoelectronic assembly, wherein the plurality of photodetectors (PD1, PD2) is mounted as an array adjacent a periphery of the substrate (320).

With respect to claim 14, Yamashita (figure 2) discloses an optoelectronic assembly, wherein the plurality of optical light guides is manufactured as a single assembly for mounting to the substrate (20).

With respect to claim 17, Yamashita (figure 2) discloses an optoelectronic assembly, wherein the optical light guide includes a fiducial to facilitate alignment of the light guide to a substrate.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (as cited above) in view of Ukechi et al. (U.S. Patent 6,647,184).

With respect to claims 1 and 5, Yamashita (figure 2) discloses an optoelectronic assembly comprising an optical emitter (LD) for emitting light along a main optical path, a mouldable (30), substantially rigid optical light guide (40) have a first end for receiving a small proportion of the light from the main optical path and a second end, and a

photodetector (PD1) located adjacent the second end of the optical light guide (40) for receiving light there from, wherein the optical light guide (40) includes a structural feature to facilitate interception of the light from the main optical path (see figure 2).

Yamashita does not explicitly disclose the optical emitter is mounted on a first substrate and the at least one photodetector is mounted on a second substrate.

However, Ukechi et al. (figure 2) disclose the optical emitter (33) is mounted on a first substrate (31A) and the at least one photodetector (34) is mounted on a second substrate (31B). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device structure of Yamashita with the first and second substrates for the optical emitter and photodetector mounted on (accordance with the teaching of Ukechi et al.). Doing so would be beneficial to obtain an optical assembly with high accuracy in coupling and reducing optical coupling loss.

With respect to claim 2, Yamashita (figure 2) discloses an optoelectronic assembly wherein the optical light guide (40) are mounted on the first substrate (20).

With respect to claim 4, Yamashita (figure 2) discloses an optoelectronic assembly further including a plurality of mouldable, substantially rigid optical guides, and a plurality of photodetectors (PD1, PD2), wherein the plurality of optical light guides each has a second end located adjacent at a respective one of the photodetectors (PD1, PD2).

With respect to claim 6, Yamashita (figure 2) discloses an optoelectronic assembly wherein the plurality of optical light guides (46, 47 and 48) is manufactured as a single assembly.

With respect to claim 10, Yamashita (figure 9) discloses an optoelectronic assembly wherein the optical waveguide (46) includes a fiducial to facilitate alignment of the guide (46) to the first substrate (320).

7. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (as cited above) in view of Jiang et al. (U.S. Patent 5,774,486).

With respect to claim 15, Yamashita substantially discloses the invention as claimed, wherein the first end of the optical light guide (40, figure 2) is positioned in the secondary light path.

Yamashita does not disclose a beam splitter for splitting a small proportion of light from the main optical path into a secondary light path.

However, Jiang et al. (figure 4) disclose a beam splitter for splitting a small proportion of light from the main optical path into a secondary light path (abstract, lines 2-4). Such an element would easily control and monitor the light emission. It would advantageously provide a power monitoring system having automatic control the emissions (column 1, lines 46-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device structure of Yamashita by forming a beam splitter for splitting a small proportion of light from the main optical path into a secondary light path (accordance with the teaching of Jiang et

al.) for the purpose of easily controlling and monitoring the light emission and providing a power monitoring system having automatic control the emissions.

With respect to claim 16, Yamashita substantially discloses the invention as claimed.

Yamashita does not explicitly disclose the optical light guide is made from a stable, low absorption plastic material.

However, Jiang et al. disclose the optical light guide being made from plastic material (column 4, lines 19-20). The plastic material is inexpensive. It would advantageously provide an easy manufacture of power monitor system and automatic power control (column 1, lines 49-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device structure of Yamashita by forming the optical light guide made from a plastic material (accordance with the teaching of Jiang et al.) for the purpose of facilitating the manufacture of the optical device with low cost and high efficiency.

8. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita and Ukechi et al. (as cited above), as applied to claim 1 above, and further in view of Jiang et al. (U.S. Patent 5,774,486).

With respect to claim 8, the combination of Yamashita and Ukechi et al. substantially disclose the invention as claimed. Yamashita (figure 2) discloses an

Art Unit: 2874

optoelectronic assembly, wherein the first end of the optical light guide (40) is positioned in the secondary light path.

Neither Yamashita nor Ukechi et al. disclose a beam splitter for splitting a small proportion of light from the main optical path into a secondary light path.

However, Jiang et al. (figure 4) disclose a beam splitter for splitting a small proportion of light from the main optical path into a secondary light path (abstract, lines 2-4). Such an element would easily control and monitor the light emission. It would advantageously provide a power monitoring system having automatic control the emissions (column 1, lines 46-62). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device structure of the above combination by forming a beam splitter for splitting a small proportion of light from the main optical path into a secondary light path (accordance with the teaching of Jiang et al.) for the purpose of easily controlling and monitoring the light emission and providing a power monitoring system having automatic control the emissions.

With respect to claim 9, the combination of Yamashita and Ukechi et al. substantially disclose the invention as claimed.

Neither Yamashita nor Ukechi et al. explicitly disclose the optical light guide is made from a stable, low absorption plastic material.

However, Jiang et al. disclose the optical light guide being made from plastic material (column 4, lines 19-20). The plastic material is inexpensive. It would

Art Unit: 2874

advantageously provide an easy manufacture of power monitor system and automatic power control (column 1, lines 49-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device structure of the above combination by forming the optical light guide made from a plastic material (accordance with the teaching of Jiang et al.) for the purpose of facilitating the manufacture of the optical device with low cost and high efficiency.

Response to Arguments

9. Applicant's arguments with respect to claims 1, 2 and 4-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2874

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Jennifer Doan". The script is cursive and fluid, with the first name and last name clearly distinguishable.

Jennifer Doan

Patent Examiner

October 27, 2005